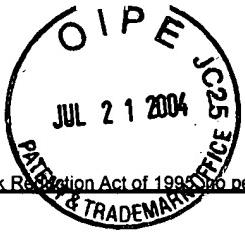
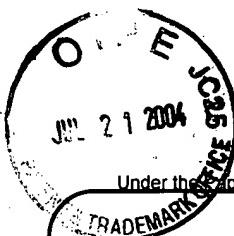


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PTO/SB/21 (02-04)

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TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number	10/039,799
Filing Date	January 4, 2002
First Named Inventor	James Bruce Pitner
Art Unit	1654
Examiner Name	Teller, R.
Attorney Docket Number	0709.018.0002

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Todd B. Buck (Reg. No. 48,574) Castellano, Malm, Ferrario & Buck
Signature	
Date	July 21, 2004

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Atty. Dkt. No. 0709.018.0002

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Pitner *et al.*

Appl. No. 10/039,799

Filed: January 4, 2002

For: Binding Protein as Biosensors

Art Unit: 1654

Examiner: Teller, R.

Atty. Docket: 0709.018.0002

Reply and Amendment under 37 C.F.R. §§1.111 and 1.121

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This reply and amendment is submitted under 37 C.F.R. §§1.111 and 1.121 and is responsive to the Office Action mailed April 22, 2004.

Amendments

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A biosensor comprising:

- a) at least one mutated binding protein and at least one thiol group attached thereto; and
- b) at least one sensor surface wherein said mutated binding protein is coupled through said thiol group to said surface;

wherein said at least one sensor surface provides a detectable signal resulting from a change in refractive index when said mutated binding protein binds to analyte.